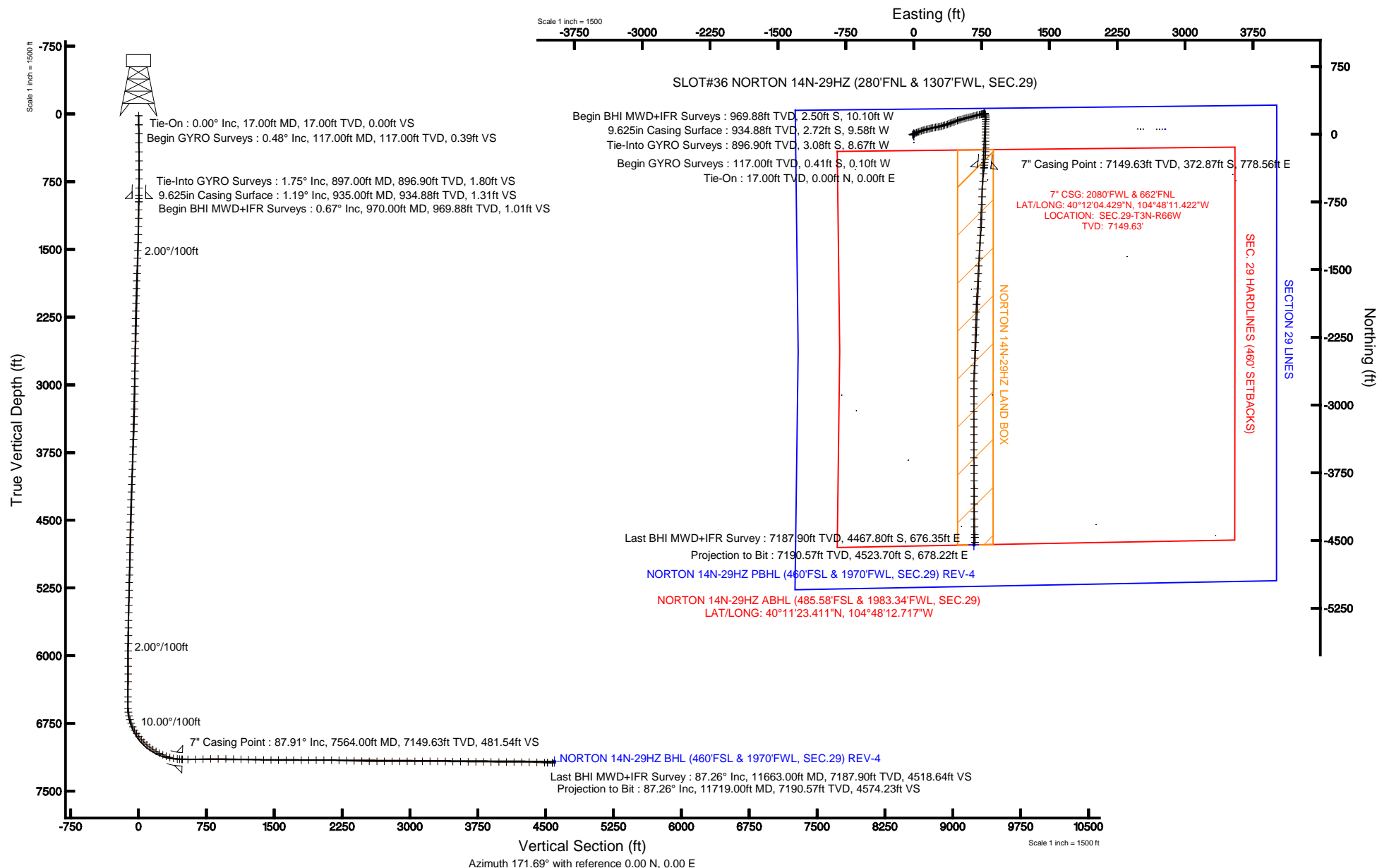


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#36 NORTON 14N-29HZ (280'FNL & 1307'FWL, SEC.29)
Field: WELD COUNTY (KERR MCGEE) Well: NORTON 14N-29HZ
Facility: SEC.29-T3N-R66W Wellbore: NORTON 14N-29HZ PWB

Plot reference wellpath is NORTON 14N-29HZ (REV-C.0) PWP

True vertical depths are referenced to XTREME 6 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 6 (RKB)	North Reference: True north
XTREME 6 (RKB) to Mean Sea Level: 4913 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#36 NORTON 14N-29HZ (280'FNL & 1307'FWL, SEC.29)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsje02 on 2/12/2013





Actual Wellpath Report

NORTON 14N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#36 NORTON 14N-29HZ (280'FNL & 1307'FWL, SEC.29)
Area	COLORADO	Well	NORTON 14N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTON 14N-29HZ AWB
Facility	SEC.29-T3N-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.2
North Reference	True	User	Wilsjef02
Scale	0.999957	Report Generated	2/12/2013 at 12:08:55
Convergence at slot	0.45° East	Database/Source file	WellArchitectDB/NORTON_14N-29HZ_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	853.88	265.37	3193859.17	1317282.17	40°12'08.114"N	104°48'21.456"W
Facility Reference Pt			3193600.49	1316426.28	40°11'59.676"N	104°48'24.876"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 6 (RKB) to Facility Vertical Datum	4913.00ft
Horizontal Reference Pt	Slot	XTREME 6 (RKB) to Mean Sea Level	4913.00ft
Vertical Reference Pt	XTREME 6 (RKB)	XTREME 6 (RKB) to Mud Line at Slot (SLOT#36 NORTON 14N-29HZ (280'FNL & 1307'FWL, SEC.29))	4913.00ft
MD Reference Pt	XTREME 6 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	171.47°



Actual Wellpath Report

NORTON 14N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#36 NORTON 14N-29HZ (280'FNL & 1307'FWL, SEC.29)
Area	COLORADO	Well	NORTON 14N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTON 14N-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	193.640	0.00	0.00	0.00	0.00	40°12'08.114"N	104°48'21.456"W	0.00	
17.00	0.000	193.640	17.00	0.00	0.00	0.00	40°12'08.114"N	104°48'21.456"W	0.00	Tie-On
117.00	0.480	193.640	117.00	0.39	-0.41	-0.10	40°12'08.110"N	104°48'21.457"W	0.48	Begin GYRO Surveys
217.00	0.730	175.040	216.99	1.41	-1.45	-0.14	40°12'08.100"N	104°48'21.458"W	0.31	
317.00	0.630	173.340	316.99	2.60	-2.63	-0.02	40°12'08.088"N	104°48'21.456"W	0.10	
417.00	0.480	230.950	416.98	3.36	-3.44	-0.29	40°12'08.080"N	104°48'21.460"W	0.55	
517.00	0.960	265.820	516.97	3.51	-3.76	-1.45	40°12'08.077"N	104°48'21.475"W	0.63	
617.00	1.260	257.560	616.96	3.52	-4.06	-3.36	40°12'08.074"N	104°48'21.499"W	0.34	
717.00	0.830	261.140	716.94	3.60	-4.41	-5.14	40°12'08.070"N	104°48'21.522"W	0.43	
817.00	1.240	300.820	816.92	2.92	-3.97	-6.79	40°12'08.075"N	104°48'21.543"W	0.80	
897.00	1.750	291.260	896.90	1.76	-3.08	-8.67	40°12'08.084"N	104°48'21.568"W	0.71	Tie-Into GYRO Surveys
970.00	0.670	294.530	969.88	0.98	-2.50	-10.10	40°12'08.089"N	104°48'21.586"W	1.48	Begin BHI MWD+IFR Surveys
1061.00	0.610	17.390	1060.87	0.25	-1.82	-10.44	40°12'08.096"N	104°48'21.591"W	0.93	
1153.00	1.710	48.970	1152.86	-0.93	-0.45	-9.26	40°12'08.110"N	104°48'21.575"W	1.34	
1243.00	3.470	61.900	1242.76	-2.56	1.72	-5.84	40°12'08.131"N	104°48'21.531"W	2.05	
1334.00	4.900	70.140	1333.52	-4.25	4.33	0.25	40°12'08.157"N	104°48'21.453"W	1.70	
1425.00	6.610	65.610	1424.05	-6.45	7.82	8.67	40°12'08.191"N	104°48'21.344"W	1.94	
1514.00	8.070	61.190	1512.32	-10.01	12.94	18.81	40°12'08.242"N	104°48'21.214"W	1.76	
1600.00	9.130	70.960	1597.36	-13.35	18.08	30.55	40°12'08.293"N	104°48'21.062"W	2.09	
1685.00	8.650	67.130	1681.34	-16.16	22.76	42.82	40°12'08.339"N	104°48'20.904"W	0.90	
1768.00	9.800	70.430	1763.27	-19.06	27.55	55.22	40°12'08.386"N	104°48'20.744"W	1.52	
1853.00	9.740	66.700	1847.03	-22.28	32.82	68.64	40°12'08.438"N	104°48'20.571"W	0.75	
1938.00	10.210	70.110	1930.75	-25.60	38.23	82.33	40°12'08.492"N	104°48'20.395"W	0.89	
2021.00	10.050	74.110	2012.46	-27.98	42.71	96.21	40°12'08.536"N	104°48'20.216"W	0.87	
2106.00	9.700	72.300	2096.20	-30.07	46.92	110.17	40°12'08.578"N	104°48'20.036"W	0.55	
2192.00	10.240	74.950	2180.90	-32.09	51.11	124.45	40°12'08.619"N	104°48'19.852"W	0.82	
2277.00	9.740	73.930	2264.61	-33.89	55.06	138.66	40°12'08.658"N	104°48'19.669"W	0.62	
2362.00	10.670	75.980	2348.26	-35.59	58.96	153.20	40°12'08.697"N	104°48'19.482"W	1.17	
2447.00	10.580	76.610	2431.81	-37.01	62.67	168.43	40°12'08.733"N	104°48'19.285"W	0.17	
2532.00	9.920	78.730	2515.45	-38.02	65.91	183.20	40°12'08.765"N	104°48'19.095"W	0.89	
2616.00	9.350	78.380	2598.26	-38.73	68.70	196.98	40°12'08.793"N	104°48'18.917"W	0.68	
2700.00	10.230	79.990	2681.04	-39.29	71.37	211.01	40°12'08.819"N	104°48'18.737"W	1.10	
2785.00	10.020	77.570	2764.72	-39.99	74.27	225.66	40°12'08.848"N	104°48'18.548"W	0.56	
2870.00	9.900	78.640	2848.44	-40.86	77.30	240.05	40°12'08.878"N	104°48'18.362"W	0.26	
2956.00	11.090	79.270	2933.00	-41.54	80.30	255.42	40°12'08.908"N	104°48'18.164"W	1.39	
3041.00	10.350	77.710	3016.51	-42.36	83.45	270.92	40°12'08.939"N	104°48'17.964"W	0.94	
3126.00	9.850	79.530	3100.19	-43.10	86.39	285.53	40°12'08.968"N	104°48'17.776"W	0.70	
3211.00	10.250	77.080	3183.89	-43.93	89.41	300.05	40°12'08.997"N	104°48'17.589"W	0.69	
3297.00	9.310	75.140	3268.64	-45.28	92.90	314.23	40°12'09.032"N	104°48'17.406"W	1.16	
3382.00	9.830	71.950	3352.46	-47.24	96.91	327.77	40°12'09.072"N	104°48'17.232"W	0.87	
3467.00	11.210	72.500	3436.03	-49.73	101.65	342.55	40°12'09.118"N	104°48'17.041"W	1.63	
3552.00	10.560	70.530	3519.50	-52.50	106.73	357.78	40°12'09.169"N	104°48'16.845"W	0.88	
3637.00	10.580	71.440	3603.06	-55.34	111.81	372.52	40°12'09.219"N	104°48'16.655"W	0.20	
3722.00	11.430	70.140	3686.49	-58.35	117.15	387.84	40°12'09.272"N	104°48'16.458"W	1.04	
3808.00	10.550	70.150	3770.91	-61.57	122.72	403.26	40°12'09.327"N	104°48'16.259"W	1.02	



Actual Wellpath Report

NORTON 14N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#36 NORTON 14N-29HZ (280'FNL & 1307'FWL, SEC.29)
Area	COLORADO	Well	NORTON 14N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTON 14N-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (152 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3893.00	11.440	69.690	3854.35	-64.82	128.29	418.48	40°12'09.382"N	104°48'16.063"W	1.05	
3977.00	10.660	68.030	3936.79	-68.33	134.09	433.50	40°12'09.439"N	104°48'15.869"W	1.00	
4062.00	12.210	69.250	4020.11	-72.06	140.21	449.20	40°12'09.500"N	104°48'15.667"W	1.85	
4147.00	11.900	69.890	4103.23	-75.72	146.41	465.83	40°12'09.561"N	104°48'15.452"W	0.40	
4233.00	11.160	69.440	4187.49	-79.24	152.38	481.95	40°12'09.620"N	104°48'15.245"W	0.87	
4318.00	10.190	70.530	4271.02	-82.38	157.78	496.74	40°12'09.673"N	104°48'15.054"W	1.17	
4403.00	10.460	74.520	4354.65	-84.74	162.34	511.27	40°12'09.718"N	104°48'14.867"W	0.90	
4488.00	11.180	73.580	4438.14	-86.81	166.73	526.61	40°12'09.762"N	104°48'14.669"W	0.87	
4573.00	10.520	71.090	4521.62	-89.34	171.58	541.85	40°12'09.809"N	104°48'14.473"W	0.95	
4659.00	11.150	76.750	4606.08	-91.44	176.03	557.37	40°12'09.853"N	104°48'14.273"W	1.44	
4744.00	10.600	77.030	4689.56	-92.72	179.66	572.99	40°12'09.889"N	104°48'14.071"W	0.65	
4829.00	11.360	76.380	4773.00	-94.07	183.39	588.75	40°12'09.926"N	104°48'13.868"W	0.91	
4914.00	11.060	77.260	4856.38	-95.41	187.16	604.84	40°12'09.963"N	104°48'13.661"W	0.41	
4999.00	10.240	77.990	4939.91	-96.47	190.53	620.18	40°12'09.997"N	104°48'13.463"W	0.98	
5084.00	11.130	73.410	5023.44	-98.08	194.44	635.43	40°12'10.035"N	104°48'13.267"W	1.45	
5169.00	10.480	72.940	5106.93	-100.38	199.05	650.68	40°12'10.081"N	104°48'13.070"W	0.77	
5254.00	10.960	75.400	5190.45	-102.38	203.36	665.89	40°12'10.124"N	104°48'12.874"W	0.78	
5339.00	9.830	76.750	5274.05	-103.83	207.06	680.78	40°12'10.160"N	104°48'12.682"W	1.36	
5424.00	11.080	74.970	5357.64	-105.36	210.84	695.73	40°12'10.197"N	104°48'12.490"W	1.52	
5510.00	10.160	74.990	5442.17	-107.15	214.95	711.04	40°12'10.238"N	104°48'12.292"W	1.07	
5595.00	9.050	76.790	5525.98	-108.54	218.42	724.78	40°12'10.272"N	104°48'12.115"W	1.35	
5680.00	7.680	76.470	5610.07	-109.58	221.27	736.82	40°12'10.301"N	104°48'11.960"W	1.61	
5765.00	6.470	78.030	5694.42	-110.36	223.60	747.02	40°12'10.323"N	104°48'11.828"W	1.44	
5850.00	5.840	78.460	5778.93	-110.88	225.45	755.95	40°12'10.342"N	104°48'11.713"W	0.74	
5936.00	4.930	80.620	5864.55	-111.16	226.93	763.88	40°12'10.356"N	104°48'11.611"W	1.08	
6021.00	3.420	73.230	5949.32	-111.58	228.26	769.91	40°12'10.370"N	104°48'11.534"W	1.88	
6106.00	2.910	69.920	6034.19	-112.38	229.73	774.36	40°12'10.384"N	104°48'11.476"W	0.64	
6191.00	2.220	81.450	6119.11	-112.81	230.72	778.02	40°12'10.394"N	104°48'11.429"W	1.01	
6276.00	1.530	82.650	6204.06	-112.79	231.11	780.77	40°12'10.398"N	104°48'11.394"W	0.81	
6361.00	1.400	53.450	6289.03	-113.25	231.87	782.73	40°12'10.405"N	104°48'11.368"W	0.88	
6446.00	1.150	48.190	6374.01	-114.21	233.06	784.20	40°12'10.417"N	104°48'11.349"W	0.32	
6532.00	0.790	53.350	6460.00	-114.96	233.99	785.32	40°12'10.426"N	104°48'11.335"W	0.43	
6587.00	0.410	54.720	6515.00	-115.23	234.33	785.78	40°12'10.429"N	104°48'11.329"W	0.69	
6656.00	2.020	141.910	6583.98	-114.28	233.51	786.74	40°12'10.421"N	104°48'11.317"W	2.96	
6698.00	7.230	151.180	6625.83	-111.16	230.61	788.47	40°12'10.393"N	104°48'11.294"W	12.49	
6741.00	12.930	155.440	6668.15	-103.99	223.86	791.78	40°12'10.326"N	104°48'11.252"W	13.36	
6783.00	16.660	169.400	6708.76	-93.45	213.66	794.84	40°12'10.225"N	104°48'11.212"W	12.23	
6826.00	21.000	177.140	6749.46	-79.61	199.90	796.36	40°12'10.089"N	104°48'11.193"W	11.63	
6869.00	26.160	179.290	6788.86	-62.54	182.71	796.86	40°12'09.919"N	104°48'11.186"W	12.16	
6911.00	30.250	180.640	6825.86	-42.92	162.87	796.86	40°12'09.723"N	104°48'11.186"W	9.86	
6954.00	34.950	181.020	6862.08	-20.07	139.71	796.52	40°12'09.494"N	104°48'11.191"W	10.94	
6996.00	37.950	181.130	6895.86	4.53	114.76	796.05	40°12'09.248"N	104°48'11.197"W	7.14	
7039.00	41.850	180.780	6928.84	31.73	87.19	795.59	40°12'08.975"N	104°48'11.203"W	9.08	
7082.00	44.830	181.310	6960.11	60.83	57.69	795.05	40°12'08.684"N	104°48'11.210"W	6.98	
7124.00	49.330	180.870	6988.70	91.15	26.94	794.47	40°12'08.380"N	104°48'11.217"W	10.74	



Actual Wellpath Report

NORTON 14N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#36 NORTON 14N-29HZ (280'FNL & 1307'FWL, SEC.29)
Area	COLORADO	Well	NORTON 14N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTON 14N-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7167.00	52.590	180.620	7015.78	124.11	-6.45	794.04	40°12'08.050"N	104°48'11.223"W	7.59	
7210.00	57.100	179.940	7040.54	158.84	-41.59	793.87	40°12'07.703"N	104°48'11.225"W	10.57	
7251.00	60.420	178.930	7061.80	193.55	-76.64	794.22	40°12'07.357"N	104°48'11.220"W	8.37	
7293.00	63.880	179.810	7081.42	230.33	-113.77	794.62	40°12'06.990"N	104°48'11.215"W	8.44	
7336.00	66.730	179.600	7099.38	268.99	-152.83	794.83	40°12'06.604"N	104°48'11.213"W	6.64	
7378.00	70.040	182.390	7114.85	307.49	-191.86	794.14	40°12'06.218"N	104°48'11.221"W	10.01	
7421.00	72.970	183.450	7128.49	347.45	-232.58	792.06	40°12'05.816"N	104°48'11.248"W	7.20	
7464.00	78.320	185.400	7139.15	388.03	-274.10	788.84	40°12'05.405"N	104°48'11.290"W	13.19	
7506.00	83.380	186.450	7145.83	428.17	-315.33	784.55	40°12'04.998"N	104°48'11.345"W	12.30	
7534.00	86.700	185.790	7148.25	455.15	-343.06	781.58	40°12'04.724"N	104°48'11.383"W	12.09	
7559.00	87.790	185.790	7149.45	479.35	-367.90	779.06	40°12'04.478"N	104°48'11.416"W	4.36	
7564.00†	87.913	185.761	7149.63	484.19	-372.87	778.56	40°12'04.429"N	104°48'11.422"W	2.53	7" Casing Point
7629.00	89.510	185.380	7151.10	547.21	-437.55	772.25	40°12'03.790"N	104°48'11.504"W	2.53	
7715.00	92.240	184.980	7149.78	630.75	-523.18	764.49	40°12'02.944"N	104°48'11.604"W	3.21	
7800.00	92.250	182.550	7146.45	713.73	-607.92	758.91	40°12'02.106"N	104°48'11.676"W	2.86	
7885.00	90.670	180.800	7144.29	797.35	-692.85	756.43	40°12'01.267"N	104°48'11.708"W	2.77	
7970.00	89.280	180.390	7144.32	881.27	-777.85	755.55	40°12'00.427"N	104°48'11.719"W	1.70	
8055.00	88.850	181.630	7145.71	965.09	-862.82	754.05	40°11'59.588"N	104°48'11.738"W	1.54	
8141.00	88.510	182.150	7147.69	1049.65	-948.75	751.21	40°11'58.738"N	104°48'11.775"W	0.72	
8226.00	88.850	183.760	7149.65	1132.92	-1033.61	746.83	40°11'57.900"N	104°48'11.831"W	1.94	
8311.00	88.420	184.180	7151.68	1215.88	-1118.38	740.95	40°11'57.062"N	104°48'11.907"W	0.71	
8396.00	87.960	184.270	7154.36	1298.74	-1203.11	734.69	40°11'56.225"N	104°48'11.988"W	0.55	
8481.00	88.820	183.880	7156.75	1381.66	-1287.86	728.65	40°11'55.387"N	104°48'12.066"W	1.11	
8566.00	89.500	182.590	7157.99	1464.87	-1372.71	723.86	40°11'54.549"N	104°48'12.128"W	1.72	
8651.00	89.570	184.120	7158.68	1548.04	-1457.56	718.88	40°11'53.710"N	104°48'12.192"W	1.80	
8736.00	89.850	183.890	7159.11	1631.01	-1542.35	712.95	40°11'52.872"N	104°48'12.268"W	0.43	
8822.00	89.410	182.920	7159.67	1715.15	-1628.20	707.84	40°11'52.024"N	104°48'12.334"W	1.24	
8907.00	89.660	182.970	7160.36	1798.45	-1713.08	703.47	40°11'51.185"N	104°48'12.390"W	0.30	
8992.00	89.970	183.440	7160.63	1881.68	-1797.95	698.72	40°11'50.347"N	104°48'12.452"W	0.66	
9077.00	90.250	182.870	7160.47	1964.91	-1882.82	694.04	40°11'49.508"N	104°48'12.512"W	0.75	
9162.00	90.770	181.590	7159.71	2048.42	-1967.75	690.73	40°11'48.669"N	104°48'12.555"W	1.63	
9248.00	89.570	182.190	7159.46	2133.00	-2053.70	687.90	40°11'47.819"N	104°48'12.591"W	1.56	
9333.00	87.960	181.890	7161.29	2216.53	-2138.63	684.87	40°11'46.980"N	104°48'12.630"W	1.93	
9418.00	87.320	181.780	7164.79	2300.08	-2223.51	682.15	40°11'46.141"N	104°48'12.665"W	0.76	
9503.00	88.400	181.790	7167.97	2383.64	-2308.41	679.51	40°11'45.302"N	104°48'12.700"W	1.27	
9588.00	88.000	181.220	7170.64	2467.30	-2393.34	677.28	40°11'44.463"N	104°48'12.728"W	0.82	
9673.00	89.450	182.050	7172.53	2550.94	-2478.28	674.85	40°11'43.624"N	104°48'12.760"W	1.97	
9759.00	90.580	182.750	7172.50	2635.38	-2564.20	671.25	40°11'42.775"N	104°48'12.806"W	1.55	
9844.00	89.900	182.020	7172.15	2718.84	-2649.12	667.71	40°11'41.935"N	104°48'12.852"W	1.17	
9929.00	90.030	181.190	7172.20	2802.52	-2734.09	665.33	40°11'41.096"N	104°48'12.882"W	0.99	
10014.00	90.490	180.280	7171.81	2886.41	-2819.08	664.24	40°11'40.256"N	104°48'12.896"W	1.20	
10099.00	89.290	179.660	7171.98	2970.47	-2904.08	664.29	40°11'39.416"N	104°48'12.896"W	1.59	
10183.00	89.590	179.940	7172.80	3053.58	-2988.07	664.58	40°11'38.586"N	104°48'12.892"W	0.49	
10268.00	90.700	179.930	7172.58	3137.66	-3073.07	664.68	40°11'37.746"N	104°48'12.891"W	1.31	
10353.00	90.030	179.480	7172.04	3221.78	-3158.07	665.11	40°11'36.906"N	104°48'12.885"W	0.95	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#36 NORTON 14N-29HZ (280'FNL & 1307'FWL, SEC.29)
Area	COLORADO	Well	NORTON 14N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTON 14N-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH DATA (152 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10439.00	89.100	179.410	7172.69	3306.94	-3244.06	665.95	40°11'36.056"N	104°48'12.875"W	1.08	
10524.00	89.810	180.320	7173.50	3391.03	-3329.06	666.15	40°11'35.216"N	104°48'12.872"W	1.36	
10609.00	88.790	179.890	7174.54	3475.06	-3414.05	665.99	40°11'34.376"N	104°48'12.874"W	1.30	
10694.00	89.820	179.820	7175.57	3559.14	-3499.04	666.21	40°11'33.536"N	104°48'12.871"W	1.21	
10780.00	89.010	180.050	7176.45	3644.20	-3585.04	666.30	40°11'32.687"N	104°48'12.870"W	0.98	
10865.00	89.970	179.450	7177.21	3728.31	-3670.03	666.67	40°11'31.847"N	104°48'12.865"W	1.33	
10950.00	89.720	179.280	7177.44	3812.51	-3755.02	667.62	40°11'31.007"N	104°48'12.853"W	0.36	
11035.00	88.950	179.230	7178.42	3896.72	-3840.01	668.72	40°11'30.167"N	104°48'12.839"W	0.91	
11121.00	89.850	178.970	7179.32	3981.95	-3925.99	670.07	40°11'29.317"N	104°48'12.822"W	1.09	
11206.00	90.120	180.200	7179.35	4066.10	-4010.99	670.69	40°11'28.477"N	104°48'12.814"W	1.48	
11291.00	89.970	179.800	7179.28	4150.16	-4095.99	670.69	40°11'27.637"N	104°48'12.814"W	0.50	
11376.00	89.350	179.640	7179.78	4234.28	-4180.99	671.10	40°11'26.797"N	104°48'12.808"W	0.75	
11460.00	88.920	179.390	7181.05	4317.44	-4264.97	671.81	40°11'25.967"N	104°48'12.799"W	0.59	
11546.00	88.090	178.570	7183.30	4402.68	-4350.93	673.34	40°11'25.118"N	104°48'12.780"W	1.36	
11631.00	87.630	178.620	7186.47	4486.96	-4435.84	675.43	40°11'24.279"N	104°48'12.753"W	0.54	
11663.00	87.260	178.080	7187.90	4518.70	-4467.80	676.35	40°11'23.963"N	104°48'12.741"W	2.04	Last BHI MWD+IFR Survey
11719.00	87.260	178.080	7190.57	4574.26	-4523.70	678.22	40°11'23.411"N	104°48'12.717"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: NORTON 14N-29HZ AWB Ref Wellpath: NORTON 14N-29HZ AWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
12.25in Open Hole	17.00	935.00	918.00	17.00	934.88	0.00	0.00	-2.72	-9.58
9.625in Casing Surface	17.00	935.00	918.00	17.00	934.88	0.00	0.00	-2.72	-9.58
8.75in Open Hole	935.00	7576.00	6641.00	934.88	7150.04	-2.72	-9.58	-384.81	777.36
7in Casing Intermediate	17.00	7564.00	7547.00	17.00	7149.63	0.00	0.00	-372.87	778.56
6.125in Open Hole	7564.00	11719.00	4155.00	7149.63	7190.57	-372.87	778.56	-4523.70	678.22



Actual Wellpath Report

NORTON 14N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#36 NORTON 14N-29HZ (280'FNL & 1307'FWL, SEC.29)
Area	COLORADO	Well	NORTON 14N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTON 14N-29HZ AWB
Facility	SEC.29-T3N-R66W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
RAYMOND PAD SECTION LINES		-29.00	56.32	2777.67	3196636.19	1317360.22	40°12'08.669"N	104°47'45.658"W	polygon
NORTON 14N-29HZ BHL (460'FSL & 1970'FWL, SEC.29) REV-3		7163.00	-4549.28	664.88	3194559.60	1312738.43	40°11'23.158"N	104°48'12.889"W	point
NORTON 14N-29HZ BHL (460'FSL & 2000'FWL, SEC.29) REV-2		7163.00	-4549.28	694.88	3194589.60	1312738.67	40°11'23.158"N	104°48'12.502"W	point
NORTON 14N-29HZ BHL ON PLAT (460'FSL & 2050'FWL, SEC.29) REV-1		7163.00	-4549.28	744.88	3194639.59	1312739.06	40°11'23.158"N	104°48'11.858"W	point
NORTON 14N-29HZ BHL (460'FSL & 1970'FWL, SEC.29) REV-4		7173.00	-4549.28	664.88	3194559.60	1312738.43	40°11'23.158"N	104°48'12.889"W	point
NORTON 14N-29HZ LAND BOX		7200.00	0.00	0.00	3193859.17	1317282.17	40°12'08.114"N	104°48'21.456"W	polygon
RAYMOND PAD HARDLINES (460' SETBACKS)		7471.00	56.32	2777.67	3196636.19	1317360.22	40°12'08.669"N	104°47'45.658"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: NORTON 14N-29HZ AWB Ref Wellpath: NORTON 14N-29HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	897.00	Generic gyro - continuous (Standard)	GYRODATA SURVEYS <117-897>	NORTON 14N-29HZ AWB
897.00	7559.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <970-7559>	NORTON 14N-29HZ AWB
7559.00	11663.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7629-11663>	NORTON 14N-29HZ AWB
11663.00	11719.00	Blind Drilling (std)	Projection to bit	NORTON 14N-29HZ AWB



Actual Wellpath Report

NORTON 14N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#36 NORTON 14N-29HZ (280'FNL & 1307'FWL, SEC.29)
Area	COLORADO	Well	NORTON 14N-29HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NORTON 14N-29HZ AWB
Facility	SEC.29-T3N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	193.640	17.00	Tie-On
117.00	0.480	193.640	117.00	Begin GYRO Surveys
897.00	1.750	291.260	896.90	Tie-Into GYRO Surveys
970.00	0.670	294.530	969.88	Begin BHI MWD+IFR Surveys
7564.00	87.913	185.761	7149.63	7" Casing Point
11663.00	87.260	178.080	7187.90	Last BHI MWD+IFR Survey
11719.00	87.260	178.080	7190.57	Projection to Bit